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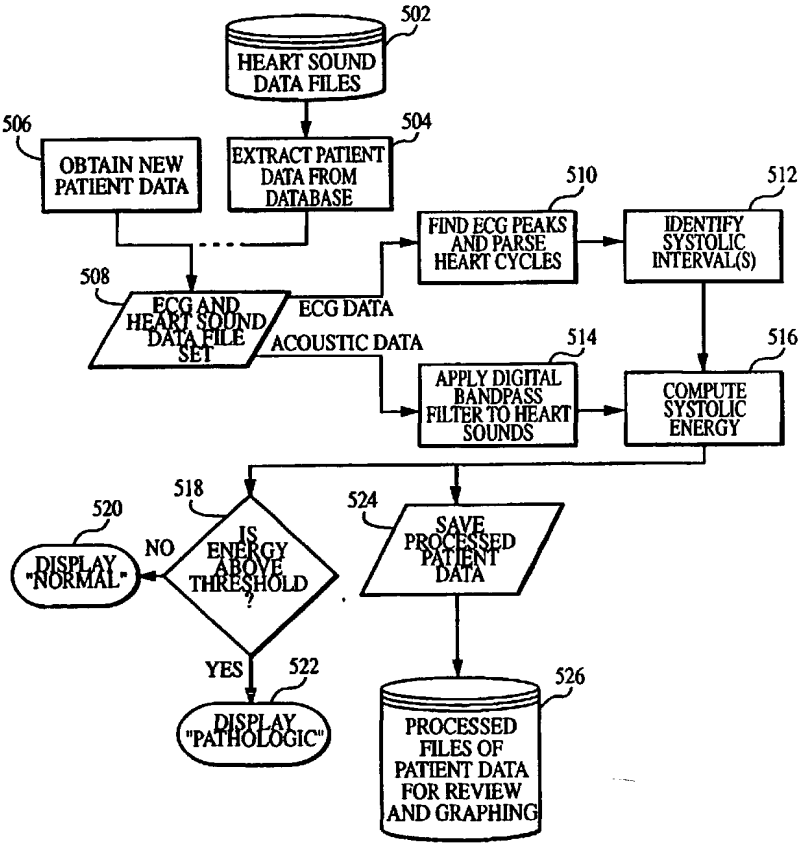
(54) Title: SYSTEM AND METHOD FOR DIAGNOSING PATHOLOGIC HEART CONDITIONS



(57) Abstract: A method of diagnosing pathologic heart conditions in which a time series of heart sounds is filtered and parsed into a sequence of individual heart cycles. A systolic interval as well as systolic sub-intervals are identified for each heart cycle. An energy value is computed for the systolic sub-interval of one or more heart cycles. The energy value computed is proportional to the energy level associated with the filtered series of heart sounds. A composite energy value is then computed for the systolic sub-intervals of one or more heart cycles and compared to a threshold level in order to distinguish between a normal heart and a pathologic heart. The system corresponding to the method is comprised of a portable computing device that manages data collection and stores data collected from new patients, and analyzes data.

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